

ways found them to contain these reptiles in various stages of digestion.

Rails are exceedingly numerous in Ireland, though less so of late years than formerly. All the eggs of this bird which I have met with in that country, amounting to some hundreds, are of a dark colour, irregularly sprinkled over with large olive-coloured spots. But the eggs of the same bird obtained in England are, according to Mr. Hewitson, of a light ground, speckled with small olive-coloured spots. How can this circumstance be accounted for? Are they really varieties of the same bird, or can difference of food cause the difference in the colour of their eggs? Specimens of each may be seen in the museum of the Bristol Institution.

#### Stormy Petrel, *Procellaria Pelagica*.

The Stormy Petrel is frequently driven on to the Irish coast by severe weather, and may then be seen hovering over the foam along the margin of the sea, as if in search of food. The petrel, though possessed of great power of wing, is frequently overwhelmed and perishes by the fury of the tempest. After a stormy night in 1832, I obtained on the Wexford coast seven or eight dead specimens which had been washed on shore; and I saw several other birds which were more or less crippled, and which could have been readily captured had they been pursued.

Almost every winter the petrel may be obtained along the shores of the Irish coast, either by shooting the straggling and tempest-driven birds, or by searching along high-water mark for the stranded ones. It need scarcely be remarked that a lee shore is the proper place to look for them.

Kingsdown, Bristol, Nov. 29th, 1843.

### XIII.—*A List of the species of Myriapoda, Order Chilopoda, contained in the Cabinets of the British Museum, with synoptic descriptions of forty-seven new Species.* By GEORGE NEWPORT, Fellow of the Royal College of Surgeons, Pres. Ent. Soc. &c.

THE *Myriapoda* have been more neglected by naturalists than almost any other division of the Articulata. This neglect has arisen in part from the uninviting appearance of the objects, and in part also from the very great similarity of the species. Most of the families and genera are recognised by well-marked characters, but the species so nearly resemble each other that it is exceedingly difficult to distinguish them. Very few of them were known to Linnæus, and many of those few were confounded by him under a single name. Dr. Leach, to whom we are indebted for laying the foundation of a truly scientific examination of this class, described but few species, most of which were British, but even

these it is now difficult to distinguish. Many of those described by Leach are in the cabinets of the British Museum, and thus enable us to obtain the most accurate information. The Museum cabinets also contain many species that were entirely unknown to Leach, and which have remained undescribed up to the present period. These specimens I have examined and named; and many months ago, at the request of the head of the Zoological Department, J. E. Gray, Esq., attached my manuscript names to them, intending to publish a full description of them at my earliest convenience. A list of these names, with notes and synonyms, has recently been prepared, with my assistance, by Dr. Hamel, to be transmitted to Professor Brandt, who also is engaged on this class; and perhaps a similar list of the whole species in the Museum cabinets, with short descriptions of the new species, may not be unacceptable to the British naturalist.

Some of the structures from which I have drawn my descriptive characters have not hitherto been made use of for identifying species, but, nevertheless, they offer some of the best and most certain distinctive marks. The chief of these are the number of the ocelli in adult specimens, and the number and form of the labial teeth. Both of these structures usually present some differences in the different species. Besides these parts I have also employed those pointed out by Brandt,—the form of the posterior legs, and the number and arrangement of their spines. These parts taken together afford good characters. An examination of the few remaining specimens of Linnæus, still existing in the Linnæan cabinet, has enabled me to identify some of the Linnæan species, and has required the names of some of Dr. Leach's species to be changed; but whenever this is done in the following list, Dr. Leach's synonym is also added. I ought here to state that Dr. Leach had not access to the Linnæan specimens.

### Class MYRIAPODA.

#### Order I. CHILOPODA.

##### Genus CERMATIA, Illiger, Leach.

1. *C. coleoprata*; *C. livida*, Leach. Madeira.
2. — var. *Floridensis*, mihi. Florida.
3. — *rugosa*, mihi. Scutella roughened, with a single dark-coloured fascia, with three fasciæ on the first tibial joint. Africa.
4. — *nobilis*, Paterson. Ceylon.
5. — *Hardwickei*, mihi; *C. longicornis*, Hardwicke. This is not the *longicornis* of Fabricius.
6. — *longitarsis*? mihi. Scutella greenish, with a single light-coloured fascia; posterior legs thrice as long as the body.
7. — *dubia*, mihi. Scutella with a median fascia, and two dark-coloured patches on the posterior margin; basilar tarsal joint very long.

8. *C. rubrilineata*, mihi. Dark orange, with three longitudinal deep reddish brown fasciæ. East Indies.
9. — *maculata*, mihi. Yellow; scutella with a single longitudinal fascia, and two black patches on each side. Swan River, Australia.
10. — *Smithii*, mihi. Greenish mottled; dorsal plates rugose, narrowed posteriorly; posterior pair of legs three times as long as the body; femoral and tibial joints short, tarsus very long, with the first basilar joint only one third longer than the second; length of body eight lines. Bay of Islands, New Zealand.

Genus LITHOBIUS, *Leach*.

1. *L. variegatus*, *Leach*. Wimbledon Common.
2. — *Hardwickei*, mihi. Brown; ocelli eighteen on each side; pre-anal ventral plate hairy and tuberculated. Singapore, E. I.
3. — *forficatus*, *Linn.*; *L. vulgaris*, *Leach*.
4. — *Leachii*, mihi; *L. forficatus*, *Leach*.
5. — *pilicornis*, mihi. Head smooth; antennæ large, very hairy; labial teeth ten; ocelli twenty-two to twenty-four; legs and body hairy.
6. — *Sloanei*, mihi. Head large, deeply punctured; ocelli twenty-four; labium elongated at its external margin; teeth eight; posterior legs long. America?
7. — *lævilabrum*? *Leach*. Young of *L. forficatus*?
8. — *castaneus*, mihi. Dark chestnut antennæ, and legs very hairy; dental margin narrow; teeth six; dorsal plates with curved impressions. Sicily.
9. — *emarginatus*, mihi. Head quadrate, ovate, eye large, single dental plates distinct, toothless, but with three slight emarginations; dorsal plates with distinct elevated border; colour ferruginous; legs yellowish. New Zealand.

Genus SCOLOPENDRA, *Linn.*

Section A. *Parvidentata*, mihi. Labial teeth small, numerous and obtuse.

1. *S. subspinipes*, *Leach*.
2. — *De Haanii*, *Brandt*. Java.
3. — *sexspinosa*, mihi. Superior surface of the basilar point of the posterior legs flattened, with two spines on the margin, two on the internal and two on the inferior surfaces.
4. — *Childreni*, mihi. Olive; head, mandibles and posterior legs ferruginous; teeth ten, indistinct; basilar joint of the posterior legs broad, with three spines; inferior surface naked.
5. — *Hardwickei*, mihi. Bright yellow, with each alternate segment, except the seventh, dark blue; labium, mandibles and anal appendages ferruginous; posterior legs short, with three minute spines; inferior surface naked. India.
6. — *cingulata*, *Latr.*
7. — *cingulatoides*? mihi. Basilar joint of the posterior legs short, flattened, with slightly elevated margins, with five spines on the internal margin, the angular one large, bifid; inferior surface convex, with two spines; teeth eight, obtuse. Corfu.



8. *S. platypus*, Brandt. Jamaica. Labial teeth eight.
9. — *platypus*? Tobago. Labial teeth six, obtuse.
10. — *angulipes*, mihi. Basilar joints of posterior legs very short and thick, subtriangular, flattened above with an elevated external margin; internal margin six-spined, the apical one large, quadrifid; inferior surface rounded, with nine spines; labial teeth eight, minute, obtuse. Madagascar.
11. — *erythrocephala*, Brandt. Java.
12. — *viridicornis*, mihi. Antennæ and dorsal surface green, margins of the segments yellow; mandibles, labium and posterior legs ferruginous; teeth eight, minute, obtuse; internal basilar margin of the legs with seven spinulæ, inferior surface with six spines in three series.
13. — *Leachii*, mihi; *S. morsitans*, Leach. Fantee, Africa.
14. — *platypoides*, mihi. Labial teeth eight, obtuse; posterior legs short; surface subconvex, with the margin elevated; internal margin acute, with six spinulæ in a double series, inferior surface with nine spinulæ; preanal scale with a longitudinal sulcus, margin rounded.
15. — *multidens*, mihi. Labial teeth very small, from twelve to fourteen in number; mandibular tooth large, with a minute tubercle; colour ferruginous; legs yellow, tarsal joints greenish. Perhaps *S. ferruginea*, Fabr.
16. — *tuberculidens*, mihi. Testaceous; mandibular tooth with an acute tubercle at its base; labial teeth eight, distinct, obtuse; basilar joint of posterior legs narrowed, flattened, and slightly margined with six spinulæ, the angular one large, quinquefid; preanal scale cordate-quadrangle. Ceylon.
17. — *longicornis*, mihi. Antennæ elongated; teeth eight, very distinct but obtuse; posterior legs slender, somewhat triangular, with the surface of all the joints flattened and margined; inferior surface longitudinally excavated with three series of spinulæ. Port Essington, Australia.
18. — *morsitans*, Linn., Fabr. Head, mandibles and labium yellowish orange, posterior margins of segments dark green; teeth ten, short, obtuse; basilar joint of posterior legs slender, flattened; internal margins with five spines, the apical one elongated, quadrifid. Africa: British Museum and Banksian cabinets.
19. — *anomia*, mihi.
20. — *punctidens*, mihi. Antennæ green; mandibles and labium orange; teeth six, black, short, obtuse, deeply punctured; posterior pair of legs with six spines on the inferior surface in two series, four in the external and two in the internal. South America?
21. — *variegata*, mihi. Dark chestnut, with the anterior margin of the frontal segment, and the posterior of each dorsal, with labium, mandibles and ventral surface of the body bright orange; antennæ olive; legs orange, with dark orange fasciæ. Demerara: British Museum and Mr. Hope's cabinet.
22. — *angulata*, mihi. Dark green; head, basilar segment, labium and mandibles orange, the latter tipped with black; legs yellowish, posterior pair green; segments flattened, with the anterior lateral margins angulated; teeth eight, small, acute. Trinidad.

23. *S. cristata*, mihi. Brown; antennæ and legs greenish; teeth six, the internal one on each side bifid; posterior segment convex, with a median longitudinal crest; legs short, rounded, with five small acute spines; inferior surface with six spines in three series, two in each series. China.
24. — *canidens*, mihi. Dark olive; teeth eight, the three internal ones on each plate small and approximated, the external one large, acute and projecting outwards; margins of legs with eight or nine spinulæ; inferior surface slightly excavated, with eight spinulæ. Egypt.
25. — *gigas*, Leach. Bright ferruginous; head green; legs with dark olive fasciæ. Venezuela?
26. — *spinigera*, mihi. Brown; posterior pair of legs slender, flattened, almost equal in size throughout, with the internal superior margin and the inferior surface with double rows of sharp spines; teeth eight, acute, irregular. Tripoli.
27. — *affinis*, mihi. Greenish brown, head and mandibles ferruginous; legs yellowish; basilar joint of posterior legs excavated, with three rows of minute spines. Greece.

Section B. *Latidentata*, mihi. The internal tooth broad and dilated at its margin; the external one small, acute and distant.

28. *S. alternans*, Leach. The internal labial teeth sharp, spatulate; mandibular tooth with a minute tubercle near its apex; posterior pair of legs subconvex, with numerous minute black spines, from thirty to forty in number, on their internal margin and surface, with the angular process multifid; inferior surface with from fifteen to twenty spinulæ, in little irregular transverse clusters; preanal scale small and elongated, margin rounded. Length six inches. S. America?
29. — *Grayii*, mihi. Dark ferruginous; head with two slight longitudinal ridges; basilar joint of the posterior pair of legs elongated, with from twelve to fifteen minute spines arranged in three or four oblique series on the internal margin and surface; inferior surface with about fourteen minute spines in three alternating series; preanal scale narrowed, elongated, posterior margin straight. Length  $6\frac{1}{2}$  inches.
30. — *complanata*, mihi. Body depressed, dull reddish brown, with the antennæ and legs, except the posterior pair, greenish; internal tooth on each side denticulated; internal margin and surface of posterior legs with twenty or more minute spines in three oblique series; inferior surface with seventeen. St. Kitts, W. Ind.
31. — *multispinata*, mihi. Dark brown, antennæ and legs green; internal margin of posterior pair of legs with six or seven minute spines in two series, a series of six on the internal surface, and from seventeen to twenty in three irregular series on the inferior. Length  $4\frac{3}{4}$  inches. St. Kitts, W. Ind.

Section C. *Longidentata*, mihi. Teeth large, acute, and lanceolate.

32. *S. spinicauda*, mihi. Light brown with a single dark-coloured longitudinal dorsal line; posterior legs long, with a single large

spine on the middle of the internal margin of the basilar joint.  
Tripoli.

33. *S. Trigonopoda*, Leach, Africa; *S. Eydouxiana*? Gerv. Teeth eight.
34. — *rubriceps*, Newport. New Zealand.
35. — *megacephala*, mihi. Olive-coloured, shining, with the anal appendages reddish olive; head large; teeth six, large, acute and serrated; posterior legs short; basilar joint long, with five large acute spines; inferior surface with six spines, two on the inner side, four on the outer, and a single spine at the base between the two series. Port Essington, Australia.
36. — *sulcidens*, mihi. Dark olive; antennæ purple; mandibles and labium orange; legs yellowish, tibial joints green; teeth six, large, acute, serrated and deeply sulcated; basilar joint of posterior legs with an elevated longitudinal ridge; internal margin with five long acute spines; inferior surface with six large spines. New Holland: British Museum and Linnæan Society collections.
37. — *scabriventris*? mihi. Dark blue violet; head and basilar segment dark green; antennæ with orange-coloured hairs at the apex; mandibles, labium and legs ochraceous; teeth six, acute, serrated, punctured and sulcated; legs as in *S. sulcidens*, of which perhaps it is a variety. New Holland.
38. — *squalidens*, mihi. Frontal segment small; antennæ finely striated; teeth six, acute, the internal one on each side with minute lobules; basilar joint of the posterior legs with five spines on the internal margin and six on the inferior surface as in *S. sulcidens*.
39. — *sulcicornis*, mihi. Ochraceous; antennæ elongated, twenty joints, very finely striated with minute hairs; teeth six, large, acute, with marginal lobules and longitudinal sulci; basilar joint of the posterior legs with five spines on the internal margin and six on the inferior surface arranged in two longitudinal series, three in each series. Port Essington.
40. — *aurantipes*, mihi. Brown olive, legs lighter orange; dental margin rather narrow; teeth six, rather short and obtuse, the external one acute and distant, the internal on each side bifid; basilar joint of the posterior legs with a median diagonal elevated ridge; internal margin with four spines, the angular one bifid; inferior surface excavated, with five spines arranged in two series. Port Essington, Australia.

Section D. *Arctidentata*, mihi. Dental margin very much narrowed, sometimes arched; teeth minute.

41. *S. lobidens*, mihi. Dark chestnut-red, with the antennæ, legs and ventral surface of the body bright yellow; dental margin very narrow; teeth on each side united into two pointed lobes, each with a smaller lobe at its external base; posterior legs cylindrical, elongated, narrowed, with four or five exceedingly minute spines; inferior surface with three minute spines in a longitudinal series. Length of dried specimen 8 inches.



42. *S. picta*, mihi. Body yellowish olive; cephalic segment dark chestnut marked with green; mandibles, labium, posterior segment and anal appendages bright red; legs and antennæ bluish green; teeth eight, distinct, obtuse; basilar joint of posterior legs slender, subcylindrical, with six marginal spinulæ; inferior surface excavated, with ten minute spines in a double longitudinal series.
43. — *viridifrons*, mihi. Orange, with the anterior of the cephalic segment, and the posterior of the dorsal, and the posterior legs and antennæ dark green; teeth eight, small, obtuse; posterior legs elongated, subcylindrical, with four minute marginal spines; inferior surface slightly excavated, with four spines arranged in two longitudinal series.
44. — *punctiventris*, mihi. Head and dorsal surface greenish brown; antennæ green; mandibles and labium bright orange; legs yellow, posterior pair olive; teeth eight, distinct, the internal ones slightly elongated; anal appendages deeply punctured; posterior legs short; with four marginal spines, the inferior surface with six spines arranged in three series, two in each series. Florida.
45. — *Westwoodii*, mihi. Dark green; legs yellow; cephalic segment, mandibles, posterior legs and segment orange red; teeth six, minute, obtuse, black; basilar and second segment of the posterior legs large, subconical, convex; internal margin and surface with two spines on the surface and three on the margin; inferior surface deeply excavated, with four minute spines on the external and two on the inner margin; anal scale elongated, margin straight; anal appendages elongated, punctured, orange. Australia: Brit. Mus. and Banksian cabinets.
46. — *subminiata*, mihi. Head, mandibular apparatus, posterior legs and segment vermilion; body depressed, yellowish, with the posterior margin of the segments green; legs yellow; teeth six, short, obtuse; legs as in *S. Westwoodii*; anal appendages short, obtuse; apex bifid. Australia.  
It is not improbable that this may be a variety of *S. Westwoodii*.

#### Genus CRYPTOPS, Leach.

1. *C. posticus*, Say.
2. — *anomalans*, mihi. Yellow; antennæ fifteen-jointed; basilar segment very large; labium narrow; segments quadrate, with two lateral, impressed, oblique lines; preanal scale subquadrate, margin rounded; lateral anal appendages deeply punctured, short and rounded. Length  $1\frac{3}{4}$  inch. —?
3. — *sexspinus*, Say.
4. — *hortensis*, Leach.
5. — *Savignii*, Leach.

#### Genus MECISTOCEPHALUS, Newport.

1. *M. punctifrons*, Newp.
2. — *punctilabium*, Newp.

Subgenus *NECROPHLÆOPHAGUS*, Newport.

1. *N. longicornis*, Leach, sp.
2. — *punctiventris*, mihi. Yellow, head dark ferruginous; antennæ yellow, scarcely three times as long as the cephalic segment; joints punctured, hairy; labium quadrate, deeply punctured; internal margin of the mandibles bidentated; anal appendages large, with deeply impressed hairy punctures; legs hairy, sixty-six pairs. Sicily.

Genus *GEOPHILUS*, Leach.

1. *G. carpophagus*, Leach.
2. — *subterraneus*, Leach.
3. — *acuminatus*, Leach.
4. — *rubens*, Say.
5. — *barbaricus*, Gervais.
6. — ————? Greece.

Genus *GONIBREGMATUS*, Newport.

1. *G. Cumingii*, Newp. Philippine Islands.

XIV.—*Catalogue of Irish Entozoa, with observations*. By O'BRYEN BELLINGHAM, M.D., Member of and Professor of Botany in the Royal College of Surgeons in Ireland, Member of the Royal Zoological, Geological and Natural History Societies of Dublin, &c.

[Continued from Charlesworth's Magazine of Natural History, vol. iv. p. 351.]

THE following list of the Entozoa indigenous to Ireland (the first part of which appeared some time since) is confined almost altogether to the species which I have discovered and examined myself, and the great majority are new to the British fauna. The classification followed is that given by Rudolphi in his 'Synopsis Entozoorum,' and adopted by Bremser and most zoologists. In the nomenclature I have also followed Rudolphi; and where species are mentioned which had been discovered previously in this country, I have been careful to notice the fact and to give the credit to the discoverer.

## Order 1. NEMATOIDEA.

## Genus 6. SPIROPTERA.

(Derived from *spira*, a curl or circle.)

Body cylindrical and elastic, slightly attenuated at each extremity. Mouth orbicular. Anus large, a little in front of the posterior extremity. Caudal portion of the male spiral, with lateral alæ, between which the penis, a simple filament, projects.

This genus was first named *Acuaria* by Bremser in his cata-